START-UP CENTRE AT PONDICHERRY UNIVERSITY

Under

“MAKE IN INDIA” Scheme

Funded by

Department of Higher Education,
Ministry of Human Resource and Development
and Department of Science and Technology
(Ministry of Science & Technology), Govt. of India.

RATIONALE FOR SETTING UP A START-UP CENTRE

- **Student’s interest:** The University offers educational programs in several areas like Chemical, Physical and Applied Sciences which includes Nanotechnology, Green Energy Technology and Life Sciences which includes Biotechnology, Food Technology and Biomedical sciences, Management Studies and Information Technology. The students have internships as a component of the curricula inculcating skills of entrepreneurship which will be enhanced by the proposed Start-up Centre.

- **Alumni / local residents’ interest:** Alumni of the University have either by themselves or through their associates, evidenced keen interest in setting up stronger business relationships and technology development activities.

- **Local industrial climate:** Pondicherry in general has emerged as an educational hub for Pharmaceutical, Medical and Technological courses and Pondicherry University is the pinnacle for higher education. This has developed a number of youngsters with innovative thinking and ideas. Moreover, there are a number of industries in and around Pondicherry and adjoining TamilNadu areas with increasing Industry – Academia interactions. Hence the climate will influence full use of the proposed Start-up Centre.

- **Govt. of India’s Initiative on Start-up Movement:** Based on the vision of the present government Start-up Centre /technology business incubators and research parks which includes women techno-parks are a growing trend and a great thrust to support first time entrepreneurs across India. In order to cater to the needs of the growing population and the sustainable economic growth, the proposed Start-up Centre will be of utmost importance in a centrally funded institution of higher education.

VISION AND MISSION

To strengthen and expand the entrepreneurship of all the colleges and departments of the Pondicherry University driving forward the entrepreneurial enterprise of its staff members
students and alumni, setting up a bridge between knowledge and wealth and bringing into full play the role of science and technology as an entrepreneurship incubator.

To be an effective interface between Industry & Academia to foster, promote and sustain commercialization of Science & Technology for mutual benefits.

**OBJECTIVES OF THE START-UP CENTRE**

- To create a technology cum management infrastructure to produce successful business enterprises that would subsequently create jobs and wealth for students, faculty and alumni.

- To provide an integrated package facility of academic & technical assistance workspace, sophisticated instrumentation facility, pre-clinical pharmacology and toxicology facility, and networking and Information and Technology support.

- To encourage and mold young entrepreneurs and start-up companies to incubate their technologies and potential IPRs for translatable products / processes.

**Thrust Areas Identified**

Based on infrastructure and expertise strengths of Pondicherry University, the thrust areas INITIALLY identified are:

**Category I: Pharmaceutical Industry** with sub categories of

- Drug discovery and validation in the areas of Modern & Indian systems of Medicines;

- Medical instrumentation to develop and validate gadgets, implants and stents;

**Category II: Biotech Industry** with subcategories of

- Diagnostic kits development and validation
- Pre-clinical Toxicology for drugs & biotech products and
- New materials & Nanotechnology.

**Category III: Food Industry** with subcategories of

- Development of value added food products
- Safety profiling of raw and finished food products.
- Development of technology driven food processing.

Other fields such as Energy, Bioremediation, Nanomaterials and Information Technology are in the pipeline.............
ACTIVITIES ENVISAGED

• Counseling & guidance to prospective entrepreneurs and startup companies on attractiveness of technology & business ideas
• Technology development and upgradation as an integrated end-to-end package service
• Prototype development of the product(s) / process(es) by the above entrepreneurs/companies
• Preparation of business plan covering market prospects, technology & financial attractiveness and promotional strategies
• Mentoring the startup companies and
• Providing assistance by way of introduction to banks & venture capitalists.

EXPERTISE OF FACULTY AND THEIR THRUST AREAS FOR MENTORSHIP

• Drug Designing by Bioinformatics tools
• Drug Discovery by chemical synthesis
• Drug Discovery from natural products (marine, terrestrial and microbial products)
• AYUSH and Herbal drug validation and Standardization
• Chemical/Biochemical Analysis of food (raw and finished products)
• Nanomaterials and Nanotechnology for various applications (Agricultural, Medical and Environmental)
• Biofuels and Green Energy Technology
• Management (Business, Finance, Marketing, IPR)
• Information Technology & Networking
• Communication and Electronic Media

INITIAL PROPOSALS ENVISAGED

• Preclinical testing and Validation of newly identified Synthetic and natural compounds for Chronic Myelogenous Leukemia Treatment
• Drug Discovery for Selected Disease Conditions
• Scientific Evaluation and Validation of Siddha Drugs (Traditional/Proprietary) for Disease Management
• Development of Standardized Herbal Extracts for Mass Production
• Probiotic formulations for commercial production
INFRASTRUCTURE DETAILS

**5000 sq. ft. for accommodating the startup Centre**

Core support mechanism with existing faculty

- Dr. A. Hannah R Vasanthi, Co-ordinator (Pharmaceutical Sciences)
- Prof. N. Sathyanarayana, (Nanomaterials)
- Dr. Balamanimaran, (Chemical Sciences)
- Dr. V. Arul (Marine Sciences)
- Dr. R. Baskaran (Biomedical Sciences)
- Dr. John Don Bosco (Food Technology)
- Dr. M. Banumathi (Management Studies)
- Mr. S. Murugaiyan (Administration)

**IP Cell**

- Dr. Ramaswamy Murugan (IP Cell Co-ordinator)
- Dr. B.M. Jaffar Ali (Green energy)
- Dr. K. Suresh Babu (Nanotechnology)
- Dr. B. Sudhakar (Stem cell Technology)

**Laboratory facilities**

- Central instrumentation facility
- IPLS facility
- Central animal facility
- Individual specialized laboratories
- Management consultants services

**NEWS AND EVENTS**

- MHRD has considered our Preliminary Project Report and sanctioned 1.5 crores for a period of 3 years under the Startup Scheme-2016
- Dr. A. Hannah Rachel Vasanthi, Assoc. Professor, Dept. of Biotechnology has been nominated as Co-ordinator of the Start-up Centre
• MHRD officials and the core team at Pondicherry University had a video conferencing and discussion at EC Hall on 12\textsuperscript{th} August 2016.

• Inauguration of the Start-up Centre by Hon’ble Lt. Governor of Puducherry by Dr. Kiran Bedi on 24\textsuperscript{th} August 2016

• Applications from budding innovators/entrepreneurs /start-ups for ideas/ process & products/ business plan from students/ faculty /alumni to be floated shortly…….